

University of Mississippi Medical Center

Canvas LMS Sole Source Letter

To Whom it May Concern:

This letter describes what makes Canvas by Instructure unique in the Learning Management System (LMS) industry and why no other LMS product can deliver the same features, functions, support, and security as Canvas.

Canvas is a true cloud-native learning platform

The Canvas learning platform has a true cloud-native architecture. It is a single instance, multi-tenant system that is designed to scale to tens of millions of users with maximum uptime. Using Amazon Web Services, the entire architecture is designed to scale in a horizontal fashion and avoid the "single database bottleneck" constraint found in traditional LMS architectures. Canvas is spread across availability zones and geographic regions to ensure that failure at a single data center does not stop service. In contrast, LMSs that use managed hosting or a "private cloud" cannot provide the same combination of scalability and geographical distribution for redundancy.

Canvas is auto-provisioned for consistent, peak performance

As opposed to traditional (fixed or even ASP) LMS provisioning, Instructure has developed techniques for the Canvas learning platform that detect usage spikes as they happen and immediately spin up additional servers and apply resources for consistent, optimal provisioning. Leveraging our cloud-native architecture and Amazon Web Services, we are able to scale horizontally instead of just vertically. This enables Canvas to provide optimal user experiences that are resistant to performance degradation even during periods of high demand and peak load.

Benefits

- Minimizes performance degradation despite usage and load.
- Admins don't have to monitor performance themselves and never have to ask for more servers
- Maximizes efficiency of servers

Any institution's data is backed-up both in near-real-time in multiple distinct locations, and additionally on periodic schedules (e.g. daily, weekly, and monthly). The near-real-time backup happens automatically, meaning that there are always up-to-date copies of an institution's data. Canvas is also self-healing across multiple geographic locations (provided by Amazon S3 Web Services) and engineered so that in production master/slave failover of data sources typically take only a few minutes. Additional backups are off-site/off-AWS, providing

March 28, 2022

additional redundancy and security. Clients can be confident that Canvas provides the best available system of data redundancy and disaster recovery.

Benefits

- Canvas school data is replicated in near-real-time for preservation of data and to facilitate failover
- Data redundancy supports our self-healing architecture to ensure availability in a data source goes down
- Using multiple geographic regions on the cloud eliminates the single point of failure

Canvas is up-to-date for all users

Like most cloud-native applications, Canvas obviates the old LMS model of versions and service packs for a seamless and dynamic system of updates and features. Canvas is designed to accept any and all system updates live, without scheduled outages. This eliminates significant hassle for institutional IT, and downtime for end-users. This also allows Instructure to provide hands-free Canvas bug fixes, security patches, and feature enhancements faster and for everyone.

An additional, if less obvious, advantage of a true multi-tenant, cloud architecture is that all Canvas users are on the same version, the version. This means that every teacher and course designer benefits from the best Canvas has to offer. The growing community of Canvas users does not have to differentiate between versions and service pack numbers, allowing more cohesive collaboration based on their shared understanding of a common system.

Robust security backed up by annual, open security audits

Canvas's robust design, development, and QA processes represent our commitment to security for all Canvas clients. Security patches are installed as soon as they are available, typically with no downtime, ensuring that the Canvas software is secure and up to date for all users.

Canvas's multi-tenancy enables our top-notch security team to monitor security for all customers holistically and granularly without worrying about differentiated and disparate versions, installations, or service packs. We conduct extensive internal security testing of Canvas and all its updates and enhancements.

Canvas is currently the only LMS provider that conducts annual, independent open security audits. This not only proves our security, but it also demonstrates our company's commitment to transparency and accountability to our customers. See <https://www.instructure.com/canvas/security> for more details.

Canvas App Center

Canvas is able to share authentication and authorization following IMS LTI Standard from the Canvas enabling Canvas courses to include LTI-compliant third-party tools. The Canvas App Center (<https://www.eduappcenter.com/>) includes over 450 third-party LTI-compliant tools, resources, and services that

can be integrated with Canvas. These tools and AppCenter website can also be leveraged by other LMS vendors in the industry.

Canvas is built to extend and to network

Canvas not only supports global standards such as IMS Common Cartridge for import and export of content and IMS Learning Tools Interoperability for integrating other systems, Instructure makes “plugging-out” to external tools easy for teachers as well as administrators at the course or account level through a browsable, store-like interface.

New Product Suite

Mastery Paths

make it easier for your teachers to help every student master course topics by delivering alternative instructional materials or activities based on their individual performance.

Blueprint Courses

University of Mississippi Medical Center can create course templates as controlled, reusable, and maintainable course templates, where updates to course shells are deployed in just a click by district administrators.

Learning Mastery for Students

The Learning Mastery view lets teachers balance traditional grading approaches that seek to measure students on individual assignments with measurements of student performance that are based on Outcomes that span multiple assignments - even multiple courses.

Canvas is unique.

We have briefly described some of the key features, capabilities, and services that make Canvas unique in the LMS industry. But we have only scratched the surface. If you require additional information or have any questions, please feel free to contact me. I and my colleagues at Instructure will gladly demonstrate why Canvas is uniquely the best education technology platform and LMS solution for your institution and the teaching and learning communities that you serve.

Sincerely,



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March 28, 2022